

## PATENT COOPERATION TREATY



## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 03R00960	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/JP2003/014042	International filing date (day/month/year) 31 October 2003 (31.10.2003)	Priority date (day/month/year) 28 March 2003 (28.03.2003)	
International Patent Classification (IPC) or national classification and IPC G09G 3/30, 3/22, 3/20, H05B 33/14			
Applicant	SHARP KABUSHIKI KAISHA		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a.  (*sent to the applicant and to the International Bureau*) a total of 6 sheets, as follows:

sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b.  (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand 31 March 2004 (31.03.2004)	Date of completion of this report 07 January 2005 (07.01.2005)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/014042

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:

- international search (under Rules 12.3 and 23.1(b))
- publication of the international application (under Rule 12.4)
- international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

The international application as originally filed/furnished

the description:

pages \_\_\_\_\_ 1-79 \_\_\_\_\_, as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the claims:

pages \_\_\_\_\_, as originally filed/furnished  
 pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19  
 pages\* 3-14 \_\_\_\_\_ received by this Authority on 15 September 2004 (15.09.2004)  
 pages\* 1-2 \_\_\_\_\_ received by this Authority on 20 December 2004 (20.12.2004)

the drawings:

pages \_\_\_\_\_ 1-45 \_\_\_\_\_, as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

- the description, pages \_\_\_\_\_
- the claims, Nos. \_\_\_\_\_
- the drawings, sheets/figs \_\_\_\_\_
- the sequence listing (*specify*): \_\_\_\_\_
- any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages \_\_\_\_\_
- the claims, Nos. \_\_\_\_\_
- the drawings, sheets/figs \_\_\_\_\_
- the sequence listing (*specify*): \_\_\_\_\_
- any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/14042

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)

Claims \_\_\_\_\_ 1-14 YES

Claims \_\_\_\_\_ NO

Inventive step (IS)

Claims \_\_\_\_\_ 1-14 YES

Claims \_\_\_\_\_ NO

Industrial applicability (IA)

Claims \_\_\_\_\_ 1-14 YES

Claims \_\_\_\_\_ NO

## 2. Citations and explanations (Rule 70.7)

The inventions of claims 1-14 appear to possess novelty and involve an inventive step because with regard to the drive circuit configuration of a current drive light-emitting element, none of the documents cited in the ISR discloses similar drive circuit configurations.

**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The inventions of claims 1-2, and 5-11 provide only a connection relationship between a partial circuit element, which is included in a pixel circuit and a peripheral circuit of a display device, and the circuit element; thus it cannot be said that the technical concept for which a patent is desired is clear.

In particular, the specification of the present application on page 29, line 16 to 23, etc. describes that "connection" includes "cases where connection is made indirectly," so if the "connection" is interpreted to include connections through floating capacitance, a relationship of connection between the circuit elements cannot be specified in practical terms and hence, specifying a circuit configuration becomes difficult.

In the judgment of Box No. V, an explanation by a written reply dated December 20, 2004 was accepted and the circuit configuration was judged to possess novelty as the connection through floating capacitance is not included.

(In order to clarify the invention, it is found more desirable to prescribe the transmission relationship, etc. of circuit operations and signals thereby clarifying what kind of signal transmission paths a state of "connection" is created for rather than to clarify partially that the "connection" is not made through floating capacitance.)